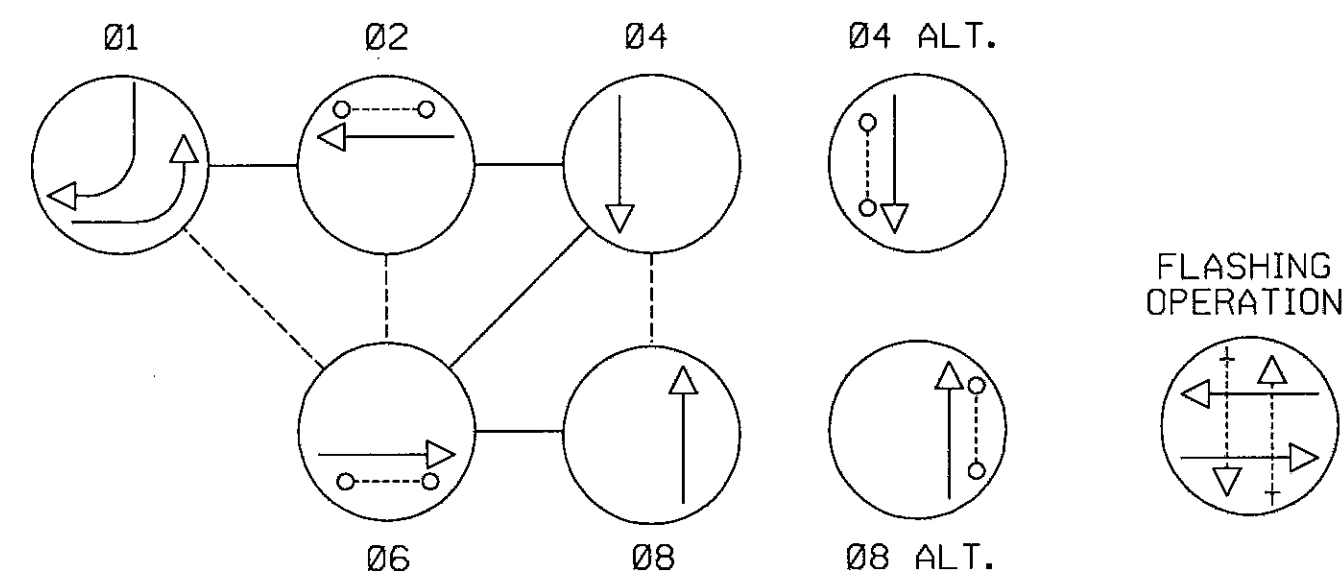


PROPOSED SIGNALS

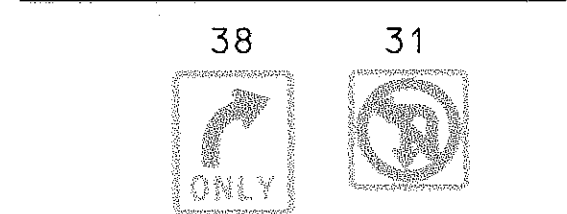
PROPOSED VIDEO DETECTION

NEMA PHASING

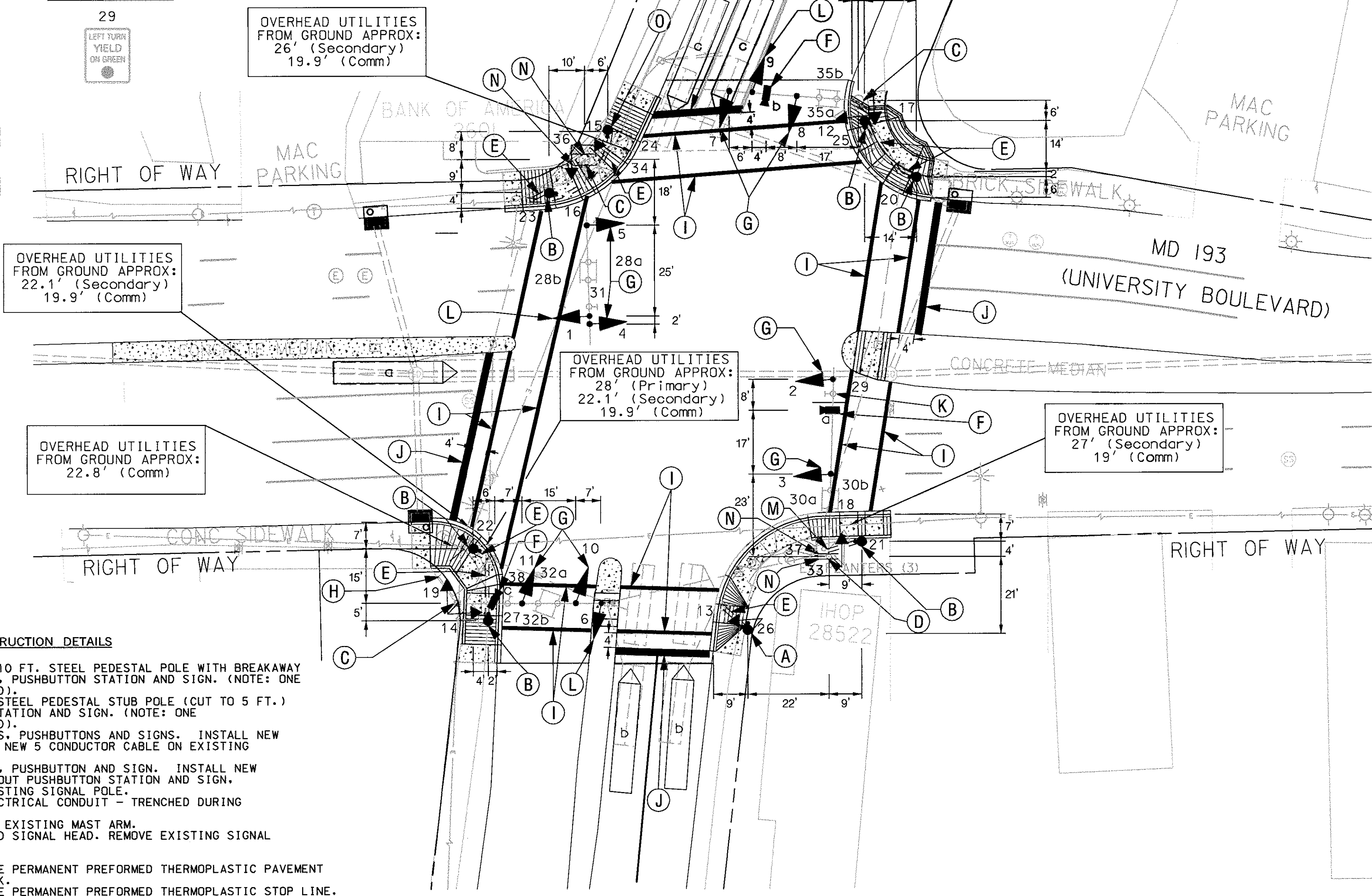
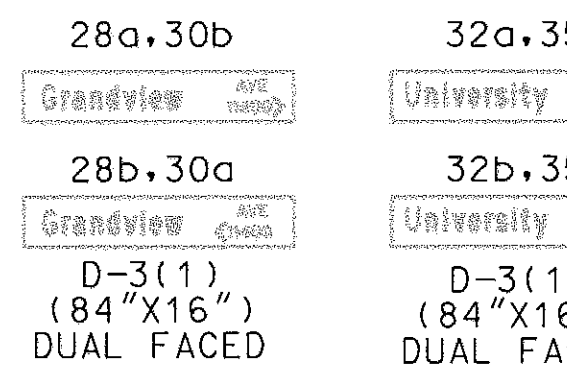


NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

EXISTING SIGNS TO REMAIN



EXISTING SIGNS TO BE REMOVED



CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL, PUSHBUTTON STATION AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- INSTALL CONCRETE FOUNDATION WITH STEEL PEDESTAL STUB POLE (CUT TO 5 FT.) WITH BREAKAWAY BASE, PUSHBUTTON STATION AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- REMOVE EXISTING PEDESTRIAN SIGNALS, PUSHBUTTONS AND SIGNS. INSTALL NEW COUNTDOWN PEDESTRIAN SIGNALS WITH NEW 5 CONDUCTOR CABLE ON EXISTING SIGNAL POLE.
- REMOVE EXISTING PEDESTRIAN SIGNAL, PUSHBUTTON AND SIGN. INSTALL NEW COUNTDOWN PEDESTRIAN SIGNAL, WITHOUT PUSHBUTTON STATION AND SIGN. WITH NEW 5 CONDUCTOR CABLE ON EXISTING SIGNAL POLE.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED DURING SIDEWALK CONSTRUCTION.
- INSTALL VIDEO DETECTION CAMERA ON EXISTING MAST ARM.
- INSTALL NEW 12 IN. LED BLACK-FACED SIGNAL HEAD. REMOVE EXISTING SIGNAL HEAD. REUSE EXISTING CABLE.
- USE EXISTING CABINET.
- INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING 12 FT. APART FOR CROSSWALK.
- INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC STOP LINE.
- REMOVE EXISTING SIGN.
- INSTALL NEW 12 IN. LED BLACK-FACED SIGNAL HEADS, WITH NEW CABLE.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL POLE MOUNTED SIGN.
- INSTALL MODIFIED CONCRETE FOUNDATION (MSHA STD.801.01-01) WITH STEEL PEDESTAL STUB POLE WITH BREAKAWAY COUPLINGS, PUSHBUTTON STATION AND SIGN. (NOTE: ONE PVC CONDUIT BEND).

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- PAVEMENT MARKINGS ARE TO BE REPLACED IN KIND, UNLESS A NEW LOCATION IS SHOWN ON PLAN. MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL MODIFICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- REFER TO PLAN SHEET 13 OF 54 FOR INSTALLATION OF AND MODIFICATIONS TO ALL ADA RAMP.
- MAINTAIN EXISTING SIGNAL UNTIL PROPOSED SIGNAL IS IN FULL SERVICE.
- TRENCH CONDUIT PRIOR TO RAMP AND SIDEWALK INSTALLATION.
- PUSHBUTTONS TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60"X60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE" IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

BY: mverotsky



GEOMETRIC LEGEND	
---	EXISTING
==	PROPOSED
UTILITY LEGEND	
SD	STORM DRAIN
G	GAS MAIN
W	WATER MAIN
S	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
T	TELEPHONE CABLES
F	FIBER-OPTIC

APPROVALS	
TEAM LEADER	_____ DATE: 1/10/09
ASST. DIR. CHIEF	_____ DATE: 1/10/09
DIVISION CHIEF	_____ DATE: 1/10/09
OFFICE DIRECTOR	_____ DATE: 1/10/09

REVISIONS	
1	INSTALL APS/PCS UPGRADE TO VIDEO DETECTION AND LED SIGNAL HEADS
2	REVISION

SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 193 (WEST UNIVERSITY BOULEVARD) AT GRANDVIEW AVENUE WHEATON, MARYLAND	
SIGNALIZATION PLAN SHEET	
SCALE: 1"=20'	ADVERTISED DATE: MARCH 21, 1990 CONTRACT NO. N/A
DESIGNED BY: ASR of Montgomery County	COUNTY: MONTGOMERY
DRAWN BY: TEL of Montgomery County	LOGMILE: 15019301.39
CHECKED BY: BLM of Montgomery County	TIMS NO.: J198
F.A.P. NO.: SEE TITLE SHEET	TOD NO.:
TS NO. 223G	DRAWING SG-01 OF 10
SHEET NO. OF	

PLOTTED: Wednesday, January 07, 2009 AT 11:00 AM
FILE: P:\2004\104006591\08-Traffic\Drawings\SG-P001_rnd193_Grand.dgn